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### **ABSTRACT**

The Malaysian electricity supply industry over the years have experience tremendous changes from a natural monopoly of generation, transmission and distribution to a competitive scenario, presently in the generation sector, these changes were brought about by a number of factors from privatisation of the utility to the re-regulation of the industry.

Tenaga Nasional Berhad (TNB) as a corporate entity today have redefined its corporate mission and vision to be in congruence with the changes in the environment. On the one hand as a responsible service provider of electricity and on the other hand as a business entity committed to maximising shareholders profit. With the industry being regulated there are constraints in the two roles. However to bridge this gap TNB can take a positive view to meet the growth of the industry and the company. To meet growth, capacity planning is an important agenda.

This paper will look into the issues and concerns that can also be considered as the challenges in capacity planning. The decision making process of concern to a utility will be discussed and its significance to TNB will also be highlighted. The paper will also show as example of a case on the weighted probability approach of capacity planning that can be adopted.

Although this method is widely used in other industry, but at the time the present study is conducted TNB has not adopted this method in its capacity planning.

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# CAPACITY PLANNING IN THE ELECTRICITY INDUSTRY: DECISION MAKING AND THE APPROACH FOR TNB

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